IN THE CLAIMS

Please amend the claims as follows.

1. (Previously presented) A substrate assembly, comprising:

a support surface; and

a plurality of high-K dielectric layers over said support surface, wherein a common metal is present in at least two adjacent layers of said plurality, and wherein at least two layers of said plurality exhibit different degrees of oxidation.

2. (Original) The substrate assembly in claim 1, wherein said plurality of high-K dielectric layers comprises a first high-K dielectric layer contacting said support surface.

3. (Original) The substrate assembly in claim 1, further comprising a barrier layer between said support surface and said plurality of high-K dielectric layers.

4. (Original) The substrate assembly in claim 1, wherein said support surface is a capacitor electrode.

5. (Previously presented) The substrate assembly in claim 1, wherein said plurality of high-K dielectric layers defines a thickness of at most 200 angstroms.

6. (Original) The substrate assembly in claim 5, wherein said plurality of high-K dielectric layers comprises a first high-K dielectric layer contacting said support surface and defining a thickness of at least a monolayer.

7. (Previously presented) The substrate assembly in claim 6, wherein said first high-K dielectric layer defines a thickness of at least 10 angstroms.

8. (Previously presented) A capacitor dielectric, comprising:

a first high-K capacitor dielectric comprising a metallic element; and

a second high-K capacitor dielectric comprising said metallic element, having a lower oxygen density than said first high-K capacitor dielectric, and contacting said first high-K capacitor dielectric.

9. (Original) The capacitor dielectric in claim 8, wherein said first high-K capacitor dielectric defines a first thickness; and wherein said second high-K capacitor dielectric defines a second thickness that is different from said first thickness.

10. (Original) The capacitor dielectric in claim 8, wherein said first high-K capacitor dielectric and said second high-K capacitor dielectric are oxides.

11. (Original) The capacitor dielectric in claim 10, wherein said first high-K capacitor dielectric is a first oxide; and wherein said second high-K capacitor dielectric is a second oxide different from said first oxide.

12. (Previously presented) A capacitor dielectric, comprising:

a first high-K capacitor dielectric comprising a metallic element; and

a second high-K capacitor dielectric comprising said metallic element and contacting said first high-K capacitor dielectric,

wherein said first high-K capacitor dielectric and said second high-K capacitor dielectric are oxides, wherein said first high-K capacitor dielectric contains a first amount of oxygen per unit volume, and wherein said second high-K capacitor dielectric contains a second amount of oxygen per unit volume different from said first amount.

13. (Previously presented) A capacitor structure, comprising:

a first electrode layer;

a dielectric layer disposed over said first electrode layer, wherein said dielectric layer comprises a plurality of consecutively-positioned sub-layers, wherein each of said sub-layers comprises a high-dielectric-constant material, wherein said dielectric layer comprises an element common to all sub-layers of said plurality, and wherein one of said sub-layers is more oxidized than another of said sub-layers; and

a second electrode layer disposed over said dielectric layer.

Claims 14-51 (Cancelled).

52. (Previously presented) A capacitor dielectric, comprising a plurality of capacitor dielectric layers defining a total thickness ranging from 50 to 70 angstroms, wherein each layer of said plurality is a high-K dielectric defining an individual thickness ranging from 10 to 40 angstroms in thickness, wherein at least one layer of said plurality manifests greater oxidation than would an equal thickness of an underlying layer of said plurality, and wherein each layer of said plurality comprises a metal oxide included within an adjacent layer of said plurality.

53. (Original) The capacitor dielectric of claim 52, wherein at least a lowest layer of said plurality defines an individual thickness of about 20 angstroms.

Claims 54-59 (Cancelled).

60. (New) The substrate assembly of claim 1, wherein the at least two layers of said plurality both include barium.

61. (New) The substrate assembly of claim 60, wherein the at least two layers of said plurality both include strontium and titanium.

62. (New) A capacitor dielectric, comprising a plurality of capacitor dielectric layers defining a total thickness ranging from 50 to 70 angstroms, wherein each layer of said plurality is a high-K dielectric defining an individual thickness ranging from 10 to 40 angstroms in thickness, wherein at least one layer of said plurality manifests greater oxidation than would an equal thickness of an underlying layer of said plurality, wherein each layer of said plurality comprises a metal oxide included within an adjacent layer of said plurality, and wherein the underlying includes a means to minimize oxidation beyond the plurality of capacitor dielectric layers.